



Glenda Ritz, NBCT
Indiana Superintendent of Public Instruction

Teachers' Toolbox

May 2016

A content focused resource for classroom instruction



Indiana Bicentennial Resources

Indiana's Bicentennial this year is a great opportunity to pull in some state history and connections to the state into your classroom. The IDOE has developed a great resource webpage for the Bicentennial and can be found [here](#).

Highlights on the webpage:

- [Bicentennial Resource Guide](#)
IDOE Social Studies Specialist, Bruce Blomberg, helped develop this extensive guide encompassing Indiana History and state facts, as well as, some activities focused on Indiana. This guide also includes a list of the Indiana Historical Markers by county.
- [Destination Indiana](#) The Indiana Historical Society brings Indiana's history to life through this interactive website.
- [Hoosier State Chronicles](#)
Provides free full text access to historical Indiana newspapers, maintained by the Indiana State Library.

Thank you teachers for
all your hard work this school year!

We appreciate you!

Handwritten signatures: Nick, Jeremy, Peggy, Bruce, Amy, Jenna, Mary, Sue, Julie, Bill, Jenny, Melissa, John, Eric, Kristi, Alison, Cheryl.

A Note from...

Teresa Brown,

Assistant Superintendent of School Improvement

Welcome to May, Teachers' Toolbox! The Indiana Department of Education is honored to celebrate and recognize our educators during National Teacher Appreciation Week, May 2-6! Thank you for making a difference every day! We know our teachers are inspiring, motivating, and connecting with our students every day. The IDOE is honored to assist with your efforts in a small way by bringing you Teachers' Toolbox as a resource. We hope these materials and strategies assist you with your daily mission of improving learning opportunities for students. We appreciate your sacrifice, commitment, and dedication to our Hoosier students. You are heroes to so many and the cornerstone of our communities! Thank you!

IDOE Summer PD

This summer many of the CCR specialists along with other divisions from the IDOE are hosting FREE professional development. The dates and host sites have been determined and the registration link is live. Go [here](#) to register.

6/7	Northeastern Middle School 7295 US 27 N, Fountain City, IN
6/9	Austin Jr/Sr High School 255 Hwy 31 South, Austin, IN
6/14	Lebanon High School 510 Essex Dr., Lebanon, IN
6/16	George Rogers Clark Middle School 1926 S. Richard Bauer Dr., Vincennes, IN
6/23	Franklin Central High School 6215 S. Franklin Road Indianapolis, IN
6/28	Merrillville High School Freshman Center 276 E. 68th Place, Merrillville, IN
6/30	Wayne High School 9100 Winchester Road, Fort Wayne, IN

A thank you from...

As a lifelong educator, I understand the hard work and passion that our educators put forward every day to help our children, school and communities. You can find resources for [Teacher Appreciation Week](#) through the United States Department of Education, the [National Education Association](#), and the [PTA](#).

Thank you for everything you do every day for Indiana's children.

Sincerely,

Glenda Ritz, NBCT

Superintendent of Public Instruction

Andrew Luck Book Club

Indianapolis Colt Quarterback Andrew Luck has launched his reading initiative, the "[Andrew Luck Book Club](#)." Join the conversation with #ALBookClub, and following @ALBookClub on social media. **Share with your students for summer reading and to help grow reading within their family!**

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Find past editions of Teachers' Toolbox [here](#).

College & Career

Teachers' Toolbox

May 2016

Career Development for Elementary Students



Check out our updated School Counseling Competencies for Students, K-12!

[Click here for the competencies!](#)

Help young students make connections to careers using resources designed especially for them! Providing career awareness opportunities early-on is a great way to help students identify with their interests, develop social/emotional understanding and naturally create inquiry and personalized investigation that links to the real world.

Resources:

- [Learn More Indiana K-5 Students](#)
- [Tips for Parents](#)
- [Classroom Materials](#) (Free!)
- [Career Activities K-2](#)
- [Career Activities 3-5](#)

Alternative Education

Need PGP Points? *Want to learn a new tech tool for your classroom?*

Have underperforming students that you want to inspire to be lifelong learners? Want to connect with other educators from around Indiana?

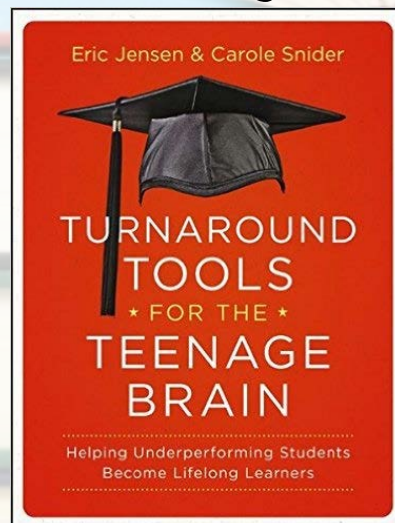
Alternative Ed Summer Book Study

Beginning Monday, May 30th, Alternative Ed Specialist, Julia Johns, will facilitate an eight week book study on the book [Turnaround Tools for the Teenage Brain](#) by Eric Jensen and Carole Snider.

Educators who participate by reading the book and participate every week can earn up to 15 PGP points, awarded after the conclusion of the study.



The study will be facilitated via **Blogger**. Watch for more detailed information and sign up on the [Alternative Ed webpage](#) and the Alternative Ed Learning Community. Email [Julia](#) if you have questions.



Dear Colleague Letter: Setting the Stage

In November 2015, the Office of Special Education Programs (OSEP) and the United States Department of Education (USDOE) sent out a "Dear Colleague" letter that provides the context for the focus of the instructional strategies and information that will be shared within this section on a monthly basis. This letter was possibly a foreshadowing of the future expectations that would be passed in the Every Student Succeeds Act (ESSA). The Dear Colleague Letter on Free and Appropriate Public Education (FAPE) that clarifies that individualized education programs (IEP) for children with disabilities must be aligned with state academic content standards for the grade in which a child is enrolled.

This letter and ESSA address the following key points:

- All students have the right to access equal opportunities to learn and grow.
- All students are capable of meaningful learning aligned with grade level standards.
- All school personnel and parents share the responsibility of educating all students.
- High Expectations lead to high performance
- Educating students with disabilities is a shared responsibility
- Ensure access to general education curriculum and grade level standards

Below are links to the Dear Colleague Letter and ESSA:

Dear Colleague Letter: FAPE & IEP:

<http://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-fape-11-17-2015.pdf>

Every Student Succeeds Act: <http://www2.ed.gov/policy/elsec/leg/essa/index.html>



Universal Design: What's That?

Universal design for learning (UDL) is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn.

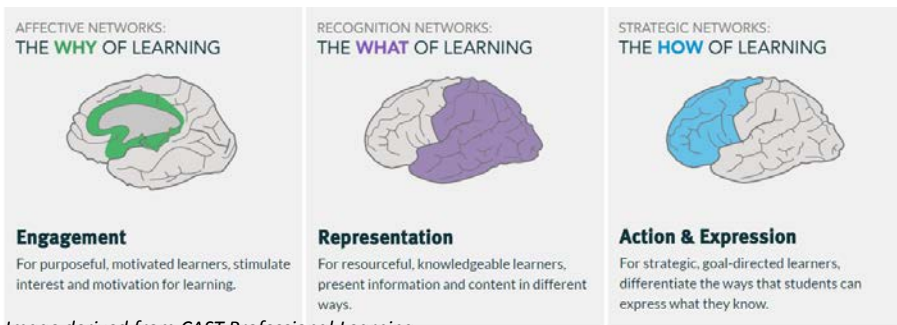


Image derived from CAST Professional Learning

Dr. George Van Horn and Mr. Bill Jenson share the experience of a more than ten year journey towards Universal Design for Learning at Bartholomew Consolidated School Corporation. They explain the commitment of the district to using UDL guidelines as an anchor for all other district initiatives, the link to teacher evaluations, and the improved outcomes for all students at BCSC.- Check it out at the link below

<https://youtu.be/mCOVI95Q8Xc>

UDL Resources:

CAST Free Learning Tools:

<http://www.cast.org/our-work/learning-tools.html#.Vx-BhfkrIpg>

UDL in ESSA: Free Webinar

Tuesday, May 17 from 1:00 - 2:00 pm EST

Register Using the Link Below:

<http://www.surveymzmo.com/s3/2727>

[718/UDL-in-ESSA-Free-Webinar](http://www.patinsproject.com/)

PATINS

Promoting Achievement through Technology and Instruction for all Students

<http://www.patinsproject.com/>



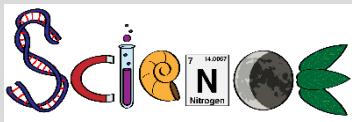
<https://www.indianaieprc.org/images/eve-ntflyers/SummInst/2016SWardSummerInstituteBrochureFINALDRAFT-331.pdf>

Elementary STEM

Teachers' Toolbox

Focused on Science, Technology, Engineering, and Mathematics

May 2016



2016 SCIENCE AND COMPUTER SCIENCE STANDARDS ADOPTED

On April 15th, the Indiana State Board of Education adopted the 2016 Indiana Academic Standards for Science. You can access the standards, implementation timeline, correlation guides, and additional resources at <http://www.doe.in.gov/standards/science-computer-science>.

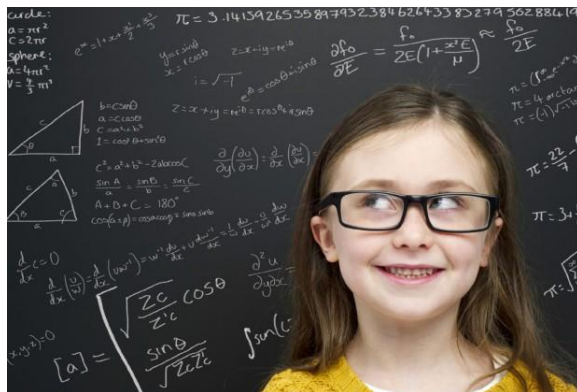
Included within the science standards for the first time are kindergarten through eighth grade computer science standards. They are designed to be woven throughout the different content areas. It is important to note that the computer science standards will not be assessed on a state level standardized assessment. You can find more information on the computer science page in this edition.

Basic Guidelines for High Ability Math

Amy Marschand, High Ability Education Coordinator

- Students with high ability in the area of mathematics should be pretested for mastery of particular topics in order to determine where their instruction should begin.
- In developing talent in the area of mathematics, one uses a combination of acceleration and enrichment.
- For differentiation within advanced math classes, teachers can use guided math groups in the same way that guiding reading groups are used. Students are grouped within the classroom according to pretest results or ease of grasping concepts. Groups can be provided with problems at their level of challenge.
- In addition to demonstrating mastery of standards, students should be provided with rich problems that require the use of analytical reasoning.

Additional topics, especially using number theory, probability, logic, graph theory, set theory, and strategy (discrete math topics) form the basis of an understanding of many real world math applications, including computer programming. There is much to teach in mathematics beyond the traditional sequence. These can be fun and allow for a great deal of creativity.



Sources of such problems:

This has a free online system for working problems. It has many problems to work and many short videos that explain the solutions. Investigate more at:

- <http://www.artofproblemsolving.com/>
- MathCounts problem of the week. Visit <https://mathcounts.org/handbook>
- <http://wildaboutmath.com/math-contest-problem-web-links/>
- <http://www.moems.org/program.htm>
- <http://www.noetic-learning.com/>



Elementary STEM_{cont.}

Teachers' Toolbox

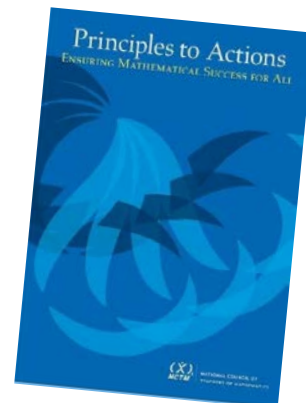
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ARE YOU INTERESTED IN JOINING A VIRTUAL BOOK STUDY FOR MATH (EITHER SUMMER OR FALL)?

Principles to Actions *Ensuring Mathematical Success for All*

National Council of Teachers of Mathematics



To help me gauge the interest level, I am asking anybody that is interested to complete a short survey. If it is decided to hold the book study due to interest, I will contact prospective participants about how it will work and you can decide at that time if you would like to participate.

Interested participants can access the short survey [HERE](#)

Brief Description: NCTM continues its tradition of mathematics education leadership by defining and describing the principles and actions that are essential to strengthen mathematics learning and teaching for all students.

Principles to Actions: Ensuring Mathematical Success for All offers guidance to teachers, specialists, coaches, administrators, policymakers, and parents:

- Builds on the Principles articulated in Principles and Standards for School Mathematics to present six updated Guiding Principles for School Mathematics
- Supports the first Guiding Principle, Teaching and Learning, with eight essential, research-based Mathematics Teaching Practices
- Details the five remaining Principles—the Essential Elements that support Teaching and Learning as embodied in the Mathematics Teaching Practices
- Identifies obstacles and unproductive and productive beliefs that all stakeholders must recognize, as well as the teacher and student actions that characterize effective teaching and learning aligned with the Mathematics Teaching Practices

Will this cost anything?

The only expense is to purchase your copy of the book. I have no funds available to assist in purchasing a copy of the book. If you decide to participate in the book study, the participant will be responsible for purchasing their own copy. Below is pricing information that I found:



[eBook](#) (NCTM Store): \$3.99 member, \$4.99 nonmember
[Paperback](#) (NCTM Store): \$23.16 member, \$28.95 nonmember.
[Paperback](#) (Amazon): \$26.06

Connect with me...

Nick Flowers

Elementary Math, Science, and STEM Specialist

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Learning Connection Community:

Elementary Math, Science, and STEM

Twitter: @MrNickFlowers

Use #INElemSTEM to showcase the great science, technology, engineering, and/or math activities going on at the elementary setting.

Social Studies



BICENTENNIAL RESOURCE

The History of Indiana State Parks

A series of curriculum units that explores Indiana's history and its ties to Indiana's beloved state parks. The Indiana State Parks system was established in 1916 as a centennial gift to Hoosiers, and our state parks' story is Indiana's story. It is fitting that as we approach state parks' 100th birthday and the State's Bicentennial, we look at how past and current events at our state parks link to past and current events in Indiana's history

Visit these units at the following link: <http://www.in.gov/dnr/parklake/8280.htm> (scroll to the bottom of page)

FOR TEACHERS: WHAT IS INDIANA KIDS' ELECTION?



On Nov. 8, students across Indiana (K-12) will elect their own governor, president and senator in a show of active citizenship through Indiana Kids' Election (IKE), an award-winning mock election program. Sponsored by the Indiana State Bar Association, Indiana Secretary of State, and the Indiana Department of Education, IKE is based on the premise that voting is only occasionally done by inspiration, but is more often done by habit.

Sign up online at www.inkidselection.com. Teachers are encouraged to access the comprehensive lesson plans, free of charge.

Questions? Contact Carissa Long – Indiana State Bar Assoc.
clong@inbar.org

Bruce Blomberg - IDOE
bblomberg@doe.in.gov

Global Learning - Social Studies

In Social Studies, much of your instruction about geography and history has ties to the world beyond American borders. Spark your students' curiosities by infusing internationalized examples into even those topics that don't appear to be global on the surface. This is just one of many examples for you.

Grade: 8 **Academic Standard Indicator:** 8.1.1

Standard Description (Academic or Indicator): The American Revolution and Founding of the United States of America: 1754 to 1801. Identify major Native American Indian groups of eastern North America and describe early conflict and cooperation with European settlers and these Native American groups.

Suggestion for Integrating International Content: Have students write a petition to King Ferdinand and Queen Isabella of Spain supporting or opposing Columbus' voyage. Petitions should include critical historical consequences.

Stay tuned for the full version for all grade levels to be released so you can do this with every standard!

Specialist Contact:

Bruce Blomberg, Social Studies Specialist, bblomberg@doe.in.gov, 317-232-9078

World Languages

Teachers' Toolbox

May 2016

Summer "prep" can be fun!

Six or more weeks away from the building... What do you do? What will your students be doing? How can you keep language alive for all parties during the summer months? Let this list of ideas help to keep languages at the forefront this summer! You'll find information for all of these on the WL & Cultures Community on the Learning Connection. Make sure you've joined because there are announcements about deadlines for most of the items below!

- **TRAVEL** (If you didn't apply for a scholarship this year, put it on your calendar to apply for one next year!)
- **Keep a blog/journal of great ideas** (because they always hit you when you don't need to use them)
- **Apply for a grant for a project you've thought about doing... Now is the time!** (No idea is too big!)
- **Plan out your professional development for 2016-2017** (IFLTA & IN-NELL in Indy, CSCTFL in Chicago, & more!)
- **Follow your students' blogs if they're traveling** (Their stories are usually heartwarming & quite funny!)
- **Explore a new tech tool that fits with your school's technology** (Nearpod, Quizizz, Airpano.com, etc...)
- **Create your own book study on a language, culture or pedagogy topic that interests you** (see list below)
- **Seek out a foreign film... it's a good reminder of those cultural nuances** (this is good for students too!)

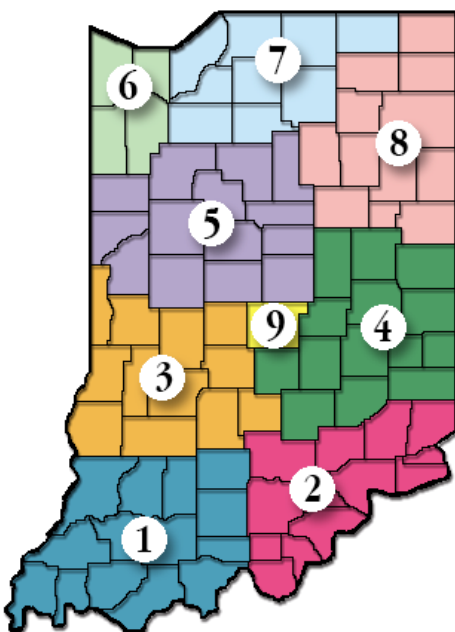
Professional Development... Find out what's new in the WL field ...World Readiness Standards, the TELL Project, Teaching with Comprehensible Input (TCI), Integrated Performance Assessments (IPAs), and so much more... Plan to have resources to work with your administrators on evaluations and SLOs and learn about new requirements that will affect what you do in the classroom!

Half Day Workshops this Summer!!

June 14 – Lebanon High School
June 16 – George Rogers Clark MS (Vincennes)
June 23 – Franklin Central HS
June 28 – Merrillville High School
June 30 – Wayne HS (Ft. Wayne)
Bring a fully-charged device & lots of questions!

Even more WL PD in collaboration with...

... the Global Connections Conference (Indy) – June 20
... the eLead Conference (Anderson) – June 22
... the C4Ignite Conference (Jeffersonville) – July 25
... the Non-Public Educators Conf. (Indy) – Sept. 15
... Indiana ACTE Conference (Indy) – Sept. 23
... IFTLA Conference (Indy) – November 3-5



Full Day Workshops specific to World Language Instruction

* Includes Administrators for ½ day

August 3 – Jasper (#1)*
August 25 – Mishawaka (#7)
August 31 – Decatur (#8)
September 8 – Connersville (#4)
September 9 – Charlestown (#2)*
September 13 – W. Lafayette (#5)*
September 21 – Greencastle (#3)
September 27-28 – Chesterton (#6)*
September 29 – Indianapolis (#9)
See your regional ESC for more info!!

We will discuss ACTFL's World Readiness Standards, Proficiency-based instruction, Integrated Performance Assessments (IPAs) and more... I look forward to seeing/meeting you this fall!

Summer Reading

DRiVE - Daniel Pink
The Birth Order Book - Dr. Kevin Lehman
The Keys to Planning for Learning - Terrill, Clementi
Raising Global Children - Stacie Berdan
Queen Bees & Wannabes - Rosalind Wiseman
Masterminds & Wingmen - Rosalind Wiseman
The Tongue-Tied American - Senator Paul Simon

Specialist Contact

Jill Woerner @GlobalEDIndiana
Global Learning and World Languages Specialist
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317-234-5705



Secondary Math

Teachers' Toolbox

May 2016

Ready, Set, Plan! Try New Things! Set High Goals!



Only a few days left in this school year. I know you are so ready for your summer break. As hard as it is right now, you still have to think about planning for next year. This is a great time to look back and reflect on what you have done this year. What worked well and what needs to be changed for next year. I want to challenge you as you think about what you want to do next year in your classes. Go out on a limb. Stretch your comfort zone. Try some new, different and innovative lessons and activities. Look for some projects that will engage, inspire and focus your students on what they are learning and the standards you are expecting them to master. Currently, all too often, students learning is a very passive, dull and boring process. Can you imagine looking forward to 6 or 7 periods a day of sitting in class just passively absorbing knowledge that is

being presented for you to learn and internalize? When I am giving professional development for teachers they are usually tired and spent after just two to three hours of trying to comprehend all that I am presenting. Try to do that every day twice a day. Set goals for your classes that you will include interesting, engaging and active lessons at least once per unit or once per month. We all know that early in a unit you must give more of the background and more practice for students to make sure they have a good foundation for the standards you are presenting. After that make it a point to have some kind of activity or project that reinforces the standard(s) you have taught and requires the students to apply what they have learned. These activities and projects are what the students remember about math class. They are what makes the students understand and use the math they have learned. This is where you as the teacher really know if the students truly understand the material or just memorized a set of steps or procedure so they can pass a unit assessment. Check out these resources for some great activities and projects. Contact me for more information.

Resources: [Desmos](#) - [Online Explorations](#)
[NCTM Illuminations](#) - [Grades 6 - 8](#), [Grades 9 - 12](#)
[Learnzillion](#) - [Video Lessons](#)
[MARS](#) - [Math Assessment Resources Services](#)
[Inside Mathematics](#) and [Shell Centre Activities](#)



Specialist Contact

William Reed
Secondary Math and
STEM Specialist
wreed@doe.in.gov
317-232-9114

New Course Offering and Free Training

CCR Bridge: Math Ready Course Training in Indiana - The CCR Bridge; Math Ready course is for students who have completed the minimal requirements (with course grades of C-'s and/or D-'s) of college preparatory work but still need support to be successful with the rigors of college and to test at the required level on college placement assessments for college level courses. The CCR Bridge course will help students gain the skills necessary meet the requirements to succeed at college level Mathematics courses. This course emphasizes understanding of mathematics concepts rather than just memorizing procedures. By engaging students in real-world applications, Math Ready develops critical thinking skills that students will use in college and their career. For more information about *Math Ready*, visit <http://www.sreb.org/math-ready>. Registration Link: <http://goo.gl/forms/KFSx1b1Eli> Math Ready Questions? Contact Bill Reed at wreed@doe.in.gov.

Student Engagement: End of School Year

In June of 2014, *Edutopia* blogger and High School English Teacher, [Nicholas Provenzano](#), posted an article, "[Ending on an Upswing](#)," about keeping students engaged as the year ends. To end on a high note, here are some ideas based on Provenzano's post, to bring into the classroom.

ENJOY THE WEATHER!

- Hold class underneath a tree, rather than in a classroom
- Take independent reading books out into the sun
- Plan a whole lesson around being outside, involve the class in planning
- Hold literature circles around the school property

START A "PASSION PROJECT!" (Provenzano)

- Stemmed from Project Based Learning, allowing student so learn what they *want* to learn
- Set aside some time for students to research pieces of your content area that they want to learn more about
- Have students come up with a way to present what they have learned in a way that is *not* a slideshow (i.e. Powerpoint) presentation

GET CREATIVE!

- Make a music video, analyzing the lyrics and looking at poetic devices
- Have the students write advice columns to next year's students
- Create a class mural based off a book theme
- Write a class theme song about topics discussed throughout the year

IDOE Summer PD

Here are the descriptions of the breakout sessions facilitated by the ELA/Literacy Specialists at the summer PD mentioned on page 1.

Elementary E/LA K-5 (John Wolf)

The most important goal of reading instruction in elementary school is to help **all** students acquire the skills and knowledge they need to read and comprehend grade-level literature and nonfiction text. This summer session will provide guidance and involve practical application strategies for designing comprehension and vocabulary instruction based on student needs. This workshop will provide educators with a range of "use it tomorrow" strategies to assist with student achievement.

ELA Grades 6-8 (Melanie Martz)

According to the ISTEP+ '14-'15 data, students in the middle grades are struggling with reading nonfiction and literature. During this session, teachers will discuss and practice instructional strategies to support students in these areas. Topics included may be: paired text activities, writing and answering text-dependent questions, vocabulary teaching, close reading activities, incorporating DOK leveled questions into instruction, and how to read different genres of text. Teachers may also spend time discussing how to support other non-English/Language Arts teachers in incorporating Content Area Literacy Standards and share resources with one another.

Secondary ELA 9-12 (Jill Lyday and Julia Johns)

Based on the Spring 2014-15 ISTEP+: English 10 statewide assessment results, students need work in these areas: Reading Literature, Reading Non-Fiction, Reading Vocabulary, and Writing. During this professional development session, teachers will engage in discussion of and practice in instructional strategies to support students' academic success. Topics **may** include the following: paired text activities; close reading strategies for fiction, nonfiction, and poetry; using the Depth of Knowledge levels to construct a variety of test questions and writing topics; integration of academic language into instruction and formative assessment; making thinking visible; and standards-based writing.

Indiana School

As part of their Chautauqua, Greensburg Community High School developed their "[Hoosiers Supporting Literacy](#)" initiative. This new student-created project pairs noteworthy Hoosiers with Hoosier classic texts, both fiction and non-fiction. The chosen noteworthy Hoosiers volunteered their time to read part of a Hoosier classic text. The goal of the project is to instill a love of reading books and create a library of noteworthy Hoosiers reading a chapter from an Indian a book or poem. This project could be a great resource to share with students whether the students are interested in the Hoosier reading or the book that is being read. Thank you, John Pratt, US History Teacher at Greensburg HS for sharing this with the IDOE!

Some recordings available:

- [Florence Henderson, actress, reads from "Little Orphan Annie"](#)
- [Joe Donnelly, U.S. Senator, reads from a column by Ernie Pyle](#)
- [Vincent Ventresca, actor, reads from The Best of James Whitcomb Riley and Papertowns](#)
- [Mohja Kahf, author, reads from her novel The Girl in the Tangerine Scarf](#)

IDOE Specialists love to hear about amazing things happening in schools and classrooms, please share!

Tech Tool Highlight



Have you heard of [Voxer](#)? It is a smart phone app, but also can be web-based, which combines the power of live voice with text, video, and photo sharing. It has been described as "walkie-talkie style" communicating. There could be many uses for it in the classroom or with virtual learning.

Michelle Green, IDOE eLearning Development Specialist, has created a great resource about using *Voxer*. Please check out her [LiveBinder](#) for more information and great resources!

Vocabulary FOCUS

[May's FOCUS Newsletter](#) is posted. Find past editions of the FOCUS newsletter in the Literacy Liaisons Learning Community.

Provided by John Wolf, Elementary Literacy Specialist

Specialist Contacts

[Melanie Martz](#)
(317) 232-9013
[Jill Lyday](#)
(317) 232-0867

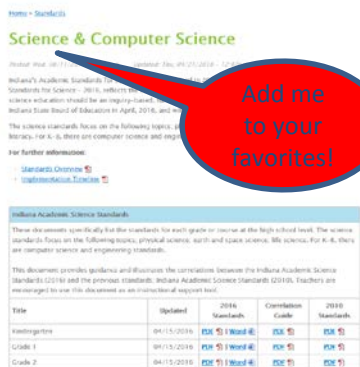
[Julia Johns](#)
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Secondary Science

Teachers' Toolbox

May 2016

Indiana Academic Standards for Science 2016



The State Board of Education adopted the Indiana Academic Standards for Science - 2016 at the April Board meeting. When Indiana adopted new science standards in 2010, we led the country with the inclusion of Engineering and Technology Standards. Indiana will continue to lead and prepare students for the 21st century workforce by including Computer Science standards K-8 and K-12 Science and Engineering Process Standards (SEPS). The science standards were developed by committees comprised of educators, colleges, and content experts from business and industry across the state of Indiana. These standards are a product of their hard work, public feedback, and revisions.

Resource:

<http://www.doe.in.gov/standards/science-computer-science>

Please find more information about the standards, resource documents, overview, implementation timeline, and correlation guides at the IDOE Science and Computer Science Page

Computer Science K-8

Indiana's Academic Standards for Computer Science allow students to be prepared in the ever-changing computer science areas and provide inquiry-based, hands-on experiences based on two components: Concepts and Practices. These standards are to be implemented in the 2016-2017 school year. The expectation is for students to work through the standards in multi-subject areas and not to be formally assessed by the State of Indiana. As students move through grade levels, they will work with and experience the standards at those grade bands (K-2, 3-5, and 6-8). The standards are based on the five core concepts: Computing Devices and Systems, Networking and Communication, Data and Information, Programs and Algorithms, Impact and Culture.



Stay Informed

Be sure to join the IDOE- Science Educators Discussion Page on the [Learning Connection](#) for professional development opportunities, resources, and connect with educators from around the state.

...May Flowers!

Check out the Indiana Native Plant & Wildflower Society for some cool activities, request a speaker, and various resources.

<http://www.inpaws.org/>

Specialist Contact

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Secondary Science and STEM Specialist



Follow me on Twitter
@JarredCorwin

Hoosiers artists tell the story of Indiana in bicentennial art show

Indiana State Museum wants visitors to see the story of Indiana art as it spans over last 200 years. More than 170 art pieces are on display in a chronological order at the museum in an exhibit called "200 Years of Indiana Art: A Culture Legacy." The first 100 years of Indiana art has been installed in the NiSource gallery and the second 100 years in the Ford gallery.



"I want people to come in, enjoy it as an art exhibition. And I want them to be entertained. I want them to be informed. I want them to have an appreciation for the quality of the work," said Mark Ruschman, the chief curator of fine arts.

The exhibit will help visitors understand the lifestyle and inspiration of artists as well as how those lifestyles and inspirations changed throughout the years. For more information visit TheStatehouseFile.com or <http://www.indianamuseum.org/>



Calling all Fine Arts Teachers:

In the 2016-17 school year, the Indiana Department of Education plans to evaluate course standards. If you are interested in being part of the review committee, please contact your specialist listed below.

Actor Wil Wheaton Brings Love of Arts to STEM Festival

Actor and writer Wil Wheaton wants to "add an A to the STEM acronym and make it STEAM." He spoke at the USA Science and Engineering Festival April 16-17 in Washington about why he thinks the arts should be represented in the acronym commonly used when referring to the science, technology, engineering and math fields.

Wheaton, 43, best known for his role as Wesley Crusher on "Star Trek: The Next Generation" in the 1980s and '90s and more recently as a fictionalized version of himself on "The Big Bang Theory," says that he has always been fascinated by science and technology, and has made it a goal of his to ensure that kids get the encouragement they need to pursue those fields. For more on the story visit:

<http://www.usnews.com/news/articles/2016-04-15/from-star-trek-to-python-actor-wil-wheaton-brings-love-of-arts-to-stem-festival>

Teaching Art in Core Subjects Resources:

<http://www.edutopia.org/>
<http://www.getty.edu/education/>



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BPA, DECA, FBLA-PBL HOLD JOINT CTSO MEETING



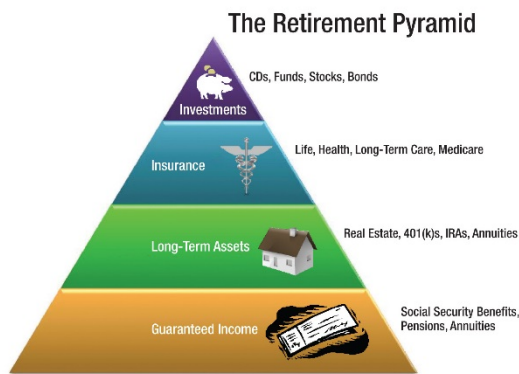
Front row: Shari Bloom, BPA; Janice Brown, DECA; Chad Bobb, BPA; Becky Kuehl, DECA. Back row: Jason Hendrickson, BPA; Debbie Darnell, BPA, Julie Jerzak, FBLA-PBL; Emily Eaton, DECA, Dena Irwin, IDOE Liaison. Not pictured: Andrea Weadock, FBLA.

Representatives from Business Professionals of America (BPA), DECA, Inc., and Future Business Leaders of America (FBLA) came together on April 20, at the Wyndham Hotel, Indianapolis, for a full-day meeting to discuss “best practices” for the betterment of all business and marketing students.

Discussion topics included state officer screening and orientation, conferences, contests, judges, awards, membership, finances, sponsorships, leadership, scholarships, board member duties, and “non-traditional’s” in our competitions.

“Each team came away with new ideas they can implement which was the goal of this first-ever meeting of all three groups” stated Dena Irwin, the IDOE liaison for BPA, DECA, and FBLA-PBL.

Personal Financial Responsibility: Teaching Retirement



A great resource for teaching about retirement planning can be found at <https://www.retireonyourterms.org>.

The webpage gives sound advice for how to “build” your retirement goals. Students can watch videos on saving and credit scores, play the “Moneytopia” game, and get tips for fraud prevention.

Save the Dates for Summer PD

DECA/Indiana Marketing Education Association

June 13-14, 2016: Westfield High School

\$mart Indiana Economic Education and Financial Literacy Conference

June 27-28, 2016: JW Marriott, Indianapolis

<http://www.econed-in.org/smartindiana-smr2016-agenda.asp>

eRevolution 2016

July 11-13, 2016: Evansville

<http://evscicats.com/erevolution/attend/>

TECH CAMP Hosted by IBEA

July 18-21: Location TBD

Summer Workshop for CS Teachers

July 25-29: Purdue University

https://purdue.qualtrics.com/SE/?SID=SV_a8A5fAYkJOjs6N

Certiport Roadshow

July 25-29: Locations TBD

Join the Learning Connection Community:
IDOE – Business Marketing and IT Education to
receive more details as they become available!

Trade & Industry

Teachers' Toolbox

May 2016

Lincoln Electric hosts Welding Workshop



Vincennes University and Lincoln Electric are hosting their annual welding workshops this June

Vincennes University is hosting two 3-day welding workshops in June. Both workshops will be taught by Lincoln Electric trainers, and assisted by the welding faculty of Vincennes University. Vincennes University will provide accommodations for the attendees, handle reservations for the workshop, and provide facilities. The workshop for beginning instructors is June 6-8 and Advanced workshop is June 8-10. The cost for these workshops will be \$300.00. That covers the training, three meals per day, a private room on the Vincennes University campus and rec center access. Each workshop will award one credit hour of college credit for course completion. Additionally, Professional Growth Points (PGP's) for licensure renewal will be provided for the program via Lincoln Electric or Vincennes University. Attendees should bring appropriate clothing, gloves, vest, helmets, etc.. These sessions will be completed in Vincennes University's new Welding Technology facility. Please contact Katherine Hopkins at 812-888-5166 or khopkins@vinu.edu to sign up. **This is open to any and all instructors who use welding in their classroom or curriculum.**

Opportunities

- Be sure to mark your calendar for the Indiana ACTE Professional Development Conference. That happens September 22-24 at the Marriot Conference Center East in Indianapolis. Topics include Using Technology in the classroom, Academic Integration Strategies, and much more. For more information and to sign up visit www.indianaacte.org.
- Vincennes University is hosting a number of professional development opportunities for CTE instructors this Summer. They are designed to help you hone your skills and stay current in the latest trends in your area. To find out what courses they are offering and how you can sign up contact Katherine Hopkins at 812-888-5166 or khopkins@vinu.edu

Resources

The CTE Journal is an international peer reviewed publication that offers valuable information for all CTE teachers. Articles cover a wide range of topics including classroom management techniques, proven strategies for teaching specific CTE courses, and STEM education initiatives, among other topics. You can find the CTE Journal at this link www.thectejournal.com/



SketchUp Pro

The SketchUp Pro Statewide K-12 license is an opportunity for public K-12 schools to have access to SketchUP Pro at no cost.

To take advantage of this awesome offer, please email Meri Carnahan at carnahan@doe.in.gov.

Content News

Interested in giving your feedback about the current state of Engineering and Technology Education in Indiana? Please go to <https://www.surveymonkey.com/r/TRDC9GC> to take the survey.

Engineering and technology has a new website on the IDOE page. Please bookmark <http://www.doe.in.gov/cte/engineering-and-technology>.

Spotlight on Construction

In Indiana, there is a need for professionals with certifications in the skilled trades. **Build your Future Indiana** is a website that provides materials and data on careers in construction and other trade craft jobs. Go to their website to order free posters, bookmarks, brochures, and more! <http://indiana.byf.org/>



Ten Tips for Managing Project-Based Learning

Both FACS and E/T Education have a strong emphasis on PBL, and as the year draws to a close your classes may be engaged in a project to finish the year. Here are some tips to finish the year strong.

1. Use a learning management system like Canvas to help organize.
2. Meet with a team representative.
3. Formally assess often.
4. Group students intentionally.
5. Differentiate instruction through grouping.
6. Allow for conflict.
7. Give useful and accessible feedback.
8. Use and return to the project directions.
9. Allow for choice and voice and products.
10. Demand high expectations!

Read the full article at

<http://www.edutopia.org/blog/20-tips-pbl-project-based-learning-educators-andrew-miller>

Preparing for College and Careers and the 21st Century Scholars Success Program

Learn more about incorporating components of the 21st Century Scholars Success Program into your PCC class. Find out about required activities to include and more information at <http://scholars.in.gov/>

Pathway Assessments

Don't forget to administer your pathway assessments <http://www.doe.in.gov/sites/default/files/cte/2015-2016-pathway-assessment-guidance-document-08-18-2015.pdf>

End of the Year Portfolios

As you expand your portfolios for Work Based Learning or Career Pathway Courses, consider using an online platform to help the students document their experiences and create a medium that can be shared.

One free option is

<http://www.portfoliogen.com/>

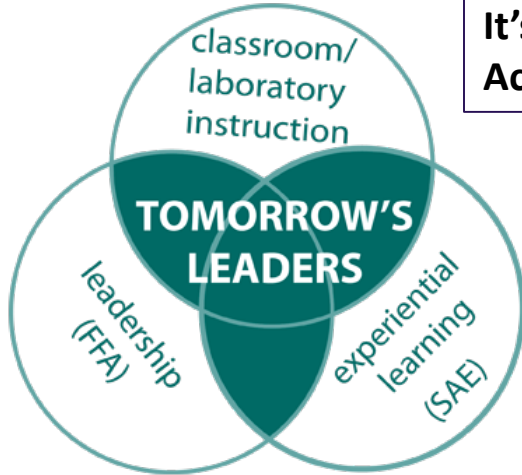


Summer FACS Professional Development opportunities coming soon!

Agriculture Education

Teachers' Toolbox

May 2016



It's the end of the year, what is Totally Acceptable...

1. To leave a few responsible students in charge of greenhouse sales
2. To order a [Teach Ag Kit](#) for your graduating seniors who are going to pursue an ag education degree,
3. To spend more time teaching outside, enjoying the beautiful weather
4. To look in to online graduate degree programs to enhance your qualifications while making your next degree more accessible
5. To have a "Countdown 'Til the End of the School Year" calendar posted on your board.

NAAE Summer Virtual Book Club

Register for FREE by June 3rd & Earn up to 12 hours of Professional Development Credit!

Get ready for an exciting summer of professional development with our Virtual Book Club! We will read and engage with the book *The Innovator's Mindset* by George Couros. Just [click here to register](#) for the book club, then pick up a copy of the book & join the [NAAE Virtual Book Club group](#) on Communities of Practice to get started! [Click here](#) to find out more!

Volunteer in East Africa with Farmer to Farmer

NAAE is partnering with the Farmer to Farmer program to provide technical assistance to farmers in developing countries. Ag educators are needed to help farmers in Kenya, Uganda, Ethiopia, and Tanzania improve productivity, access new markets, and conserve natural resources.

Farmer to Farmer currently has more than [30 assignments available](#), for lengths of time beginning at 2 weeks. They also have several special projects for interested agricultural educators that are not posted on the website.

Watch this video about Farmer to Farmer volunteer Lisa Campion, and contact [Julie Fritsch, NAAE Communications/Marketing Director](#), to let her know you are interested in learning more about the Farmer to Farmer program.

Resources:

- <http://conf.purdue.edu/teachag>

Important Dates

May 15 – NAAE Awards Nominations Due
June 7-9 – IAAE Summer Workshop
June 13-16 – Indiana FFA State Convention
June 23-26 – NAAE Region IV, Cincinnati

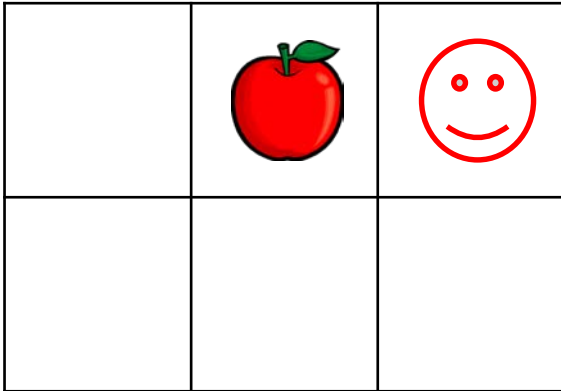
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Computer Science

Teachers' Toolbox

May 2016



Which way should the Smiley move to get the apple?

Computer Science Workshops

"The beauty of the K-8 Computer Science (CS) standards and all of the course code pathways available today from the IDOE make it possible for all students to acquire not only fundamental CS skills, but to progressively develop those skills throughout their education" said Michele Roberts, IUPUI Faculty and Director of the Computer Science Outreach Program. "As one of many examples in a free K-5 PD workshop, elementary school teachers are introduced to algorithms and control structures and learn how to use grids (see left) to engage students in building their computational skills. These concepts are expanded in the middle and high school levels with more rigor."

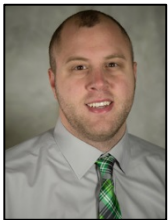
Tumblr: <http://blog.code.org/post/143481060186/indiana-introduces-computer-science-standards-for>

#CSforAll

Twitter: <https://twitter.com/codeorg/status/725370963248828416>

#Indiana_All_In

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Save the Dates for Summer PD

Computer Science Workshops

June and July: Locations TBD

Summer Workshop for CS Teachers

July 25-29: Purdue University

https://purdue.qualtrics.com/SE/?SID=SV_a8A5fAYkJOjss6N

Join the Learning Connection Community:

IDOE – Computer Science K-12 to receive more details as they become available!

IUPUI Computer Science teacher, Michele Roberts, is helping teachers make the connection between the new CS standards and what they are already doing in their classroom during a recent one-day workshop.

